FORENSIC PSYCHIATRY REPORT
Sentencing Evaluation

CASE INFORMATION

Name:	Joshua Cook
Court:	United States District Court, District of New Hampshire
Case Number:	1:18-cr-00143-JL
Date of Report:	June 16, 2020

BACKGROUND INFORMATION

Joshua Cook is a 22-year-old male defendant who was charged with Distribution of Controlled Substances Resulting in Death, alleged to have occurred on February 6, 2018 in Hillsborough County, New Hampshire.

OPINIONS

The following opinions are offered with reasonable medical certainty:
Joshua Cook, at the time of this report and upon review of the available medical and psychiatric records, met DSM-5 criteria for the following diagnoses:

1. Opioid Use Disorder, severe
2. Unspecified Bipolar Disorder
3. Conduct Disorder, Unspecified Onset

SOURCES OF INFORMATION

1. John H. Sununu Youth Services Center records (2012 - 2015)
2. Catholic Medical Center records (2015)
3. Indictment
4. Police records
5. Plea Agreement
6. Presentence Investigation Report

PSYCHIATRIC INFORMATION

Diagnoses
Joshua Cook met DSM-5 criteria for a diagnosis of **Opioid Use Disorder, Severe**. This was based on Mr. Cook's reported symptoms, per medical records, of:

1. Persistent desire or unsuccessful efforts to cut down or control opioid use
2. A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects
3. Craving or a strong desire to use opioids
4. Important social, occupational or recreational activities are given up or reduced because of opioid use
5. Continued use despite knowledge of having a persistent or recurrent physical (Hep C; recurrent abscess formations related to IV heroin use) or psychological (depression; anxiety) problem that is likely to have been caused or exacerbated by opioids
6. Tolerance
7. Withdrawals

Joshua Cook also met DSM-5 criteria for a diagnosis of **Unspecified Bipolar Disorder**. This was based on Mr. Cook's reported symptoms, per records, of:

1. A distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased goal-directed activity or energy
2. During the period of mood disturbance, he had the following symptoms:
    a. Decreased need for sleep
    b. Flight of ideas and subjective experience that thoughts are racing
    c. Distractibility
    d. Psychomotor agitation (irritability; anger; increased sexuality)
    e. Excessive involvement in activities that have a high potential for painful consequences
3. Mood disturbance caused marked impairment in social and occupational functioning, and necessitated hospitalization
4. Unspecified modifier was used because his symptoms may be caused by recreational drug use (as he was actively using during those times)

Joshua Cook also met DSM-5 criteria in his adolescence for a diagnosis of **Conduct Disorder, Unspecified Onset.** This was based on Mr. Cook's reported symptoms, per records, of:

1. A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of the following:
    a. Often bullies, threatens, or intimidates others
    b. Often initiates physical fights
    c. Has stolen while confronting a victim
    d. Has broken into someone else's house, building, or car (stealing van at age 15)
    e. Has stolen items of nontrivial value without confronting a victim (shoplifting)
    f. Has run away from home at least twice while living in parental home
2. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning

Joshua Cook's records suggested other psychiatric diagnoses including Cannabis Use Disorder; Stimulant Use Disorder; Attention Deficit Hyperactivity Disorder (ADHD); Unspecified Anxiety Disorder; and Unspecified Depressive Disorder. Although, there was not enough information in the records to meet DSM-5 criteria for these diagnoses, they cannot be ruled out.

Past Treatment

Joshua Cook received psychiatric care while at John H. Sununu Youth Services Center (SYSC) during the period of 2012 until 2015. Prior to that, it is unclear if he sought psychiatric treatment, although records indicate that he was given a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) by his primary care physician and was prescribed medications for that. Since childhood and while at SYSC, Mr. Cook was tried on multiple psychotropic medications including:

1. Concerta (methylphenidate) - stimulant
2. Focalin (dexmethylphenidate) - stimulant
3. Wellbutrin (bupropion) - antidepressant
4. Trazodone – antidepressant and sleep agent
5. Intuniv (guanfacine) – nonstimulant drug used for treatment of ADHD
6. Abilify (aripiprazole) – atypical antipsychotic and mood stabilizer
7. Seroquel (quetiapine) – atypical antipsychotic and mood stabilizer
8. Zoloft (sertraline) – antidepressant
9. Buspar (buspirone) – antianxiety medication

Mr. Cook also participated in drug abuse treatments on several occasions for short periods of time without completing the programs:

1. Farnum Center in Manchester, NH x 5 days in 2015
2. Phoenix House in Dublin, NH x 10 days in 2016 and 19 days in 2018 (continued to use drugs while in the program)

Compliance

On review of the medical records, Joshua Cook has been complaint with his treatment and medications while at John H. Sununu Youth Services Center (SYSC). However, after leaving the facility, he did not seek psychiatric care and stopped all his psychiatric medications. His last reported psychiatric treatment was in 2015 while at SYSC.

Psychological Testing

The following psychological testing was done while Mr. Cook was placed at SYSC:

1. UCLA PTSD Assessment (10/2/2014): strongly positive for PTSD symptoms
2. SASSI (Substance Abuse Subtle Screening Inventory) completed on 2/27/2015: indicated high probability for Substance Use Disorder

In addition, records indicate that an IEP done while Mr. Cook was in school showed "major problems with behavior and attitude."

Family History

Mr. Cook's biological mother had a history of Substance Use Disorder (including opioids) and Bipolar Disorder. There was no report of paternal psychiatric illnesses.

MEDICAL INFORMATION

Mr. Joshua Cook was diagnosed with Hepatitis C at age 17 as a result of intravenous heroin use. He also has a reported history of Asthma and Migraine Headaches.

SOCIAL INFORMATION

Social and Developmental Information

Joshua Cook was born on [redacted], 1997, in Derry, NH, to a nineteen-year old mother. His parents separated when he was two years old, and he was cared for by his grandmother. His mother was dealing with significant drug and mental health issues at the time. His mother was in and out of his life throughout his childhood, which caused

significant separation anxiety for Mr. Cook growing up. He was diagnosed with attachment disorder at young age.

Mr. Cook lived primarily with his grandmother and father, who had custody of him since age five. He described his father as being "strict", but he reportedly had no psychiatric or drug issues. Joshua Cook has three younger half-siblings. His father lives in Auburn, NH, and owns and operates a roofing company. His mother lives in Manchester, NH, and works as a recovery coach.

Mr. Cook was committed twice to John H. Sununu Youth Services Center (SYSC) in Manchester, NH:

- August 21, 2013 (age 15)
- February 26, 2015 (age 17)

After his last discharge from SYSC, he was homeless for almost three years prior to this recent arrest. He reported sleeping on the streets or living with friends for short periods of time.

Education

Mr. Cook obtained his diploma from Memorial High School in Manchester, NH while in custody at SYSC. He attended two weeks of classes at Manchester Community College. His records indicate that he repeatedly got in trouble at school starting at age seven and was suspended from school on multiple occasions due to poor behaviors, refusal to comply with rules and bullying.

Employment

Mr. Cook did not have a long-term job his entire life. He reportedly worked briefly at his father's construction company, Derek Cook Construction, in Manchester, NH. He was last employed there in 2017. Father estimated that he worked for him a total of five days.

Military

No reported military experiences

Legal

Adult Criminal Convictions:

- 3/27/2015: Simple Assault Charges (12-month commitment to SYSC; had violation of probation 3 times)
- 4/22/2016: Theft by unauthorized taking and conspiracy to commit theft by unauthorized taking
- 11/14/2016: False report to Law Enforcement and Receiving Stolen Property
- 8/9/2017: Endanger Welfare of Child; Reckless Conduct; Abandoning a vehicle; Driving vehicle after suspension
- 2/6/2018: Possession of Controlled Drug (Fentanyl); Possession of Controlled Drug (Methamphetamine).

Mr. Cook had multiple placements including:

- John H. Sununu Youth Services Center (SYSC - secure detention) (August 2013 and February 2015)
- Mount Prospect Academy in Plymouth (2012)
- Midway Shelter (2012)
- Easter Seal Co-Occurring Program (2011)

As a juvenile, Mr. Cook had some legal troubles including:

- 10/2010: possession of a controlled substance (THC)
- 12/2010: simple assault (stuck another kid in the face with his hand in school)
- 03/2010: robbery (used physical force on another by grabbing his sweatshirt in the neck area, pushing him up against the wall and reaching into his pockets, removing money)

Substances

Mr. Cook reported his first drug use at age eleven (smoked marijuana). At age twelve, he stole money from his classmates to obtain prescription pills, including benzodiazepines. Following that, he reportedly used multiple substances including K2/Spine (synthetic cannabinoids), bath salts, stimulants including cocaine, and heroin. He reported his first heroin and cocaine use was after his parole from SYSC at age seventeen. Since then, he consistently used both substances for at least a year, before he substituted fentanyl for heroin and began injecting methamphetamine at age eighteen. He described methamphetamine as his drug of choice. He continued using both drugs on a regular basis until his recent arrest.

RISK ASSESSMENT

Experts cannot accurately predict long term future acts of violence or criminality. A dangerousness evaluation, however, may assist those making decisions by providing information about risk factors associated with violence. These risk factors should be considered by balancing those present and absent, and guide plans to ensure safety or reduce risk.

Major Risk Factors that were PRESENT based on review of records:

- Male gender
- Young, between 18-29 years old at time of evaluation
- Low socioeconomic status
- Criminal charges
- Substance abuse
- Depression
- Mania
- Angry, impulsive, lacking empathy, sense of entitlement

Relevant Risk Factors that were ABSENT included:

- Low intelligence (I.Q. <85)
- Poor education (<9th grade completed)
- History of violent behavior
- History of frequent violent behavior (more than three separate incidents)

- Brain injury
- Older patient with vascular dementia
- Schizophrenia
- Hallucinations
- Delusions
- History of violent suicide attempt
- Antisocial personality disorder
- Borderline personality disorder

SENTENCING ASSESSMENT

Sentencing generally serves four purposes: retribution, deterrence, rehabilitation, and incapacitation. The likelihood of individual benefit to the offender and society as an outcome of rehabilitation through treatment of psychiatric illness during punishment is considered. No opinion is offered in the areas of retribution, deterrence, or incapacitation.

Mr. Joshua Cook's medical records were reviewed in order to offer information about any underlying mental illness, and its impact on his behavior. I have carefully reviewed his forensic and treatment records. Overall, records reflect that Mr. Cook has struggled with psychiatric illnesses since adolescence, which played a major role in his behaviors that lead to the criminal charge of Distribution of Controlled Substances Resulting in Death.

To better understand Mr. Cook's behaviors, it is useful to identify the underlying risk factors through a bio-psycho-social approach that contributed to his current psychiatric illnesses. These risk factors included the following:

1. Biologic/Genetic factors: Mr. Cook's mother had a diagnosis of Bipolar Disorder and Substance Use Disorder. Children of substance abusing parents are more than twice as likely to have a drug use disorder by young adulthood as compared to their peers. Moreover, they are at risk for a wide variety of other negative outcomes, including emotional, social, and behavioral adjustment problems. Not surprisingly, these elevated rates of disturbance placed Mr. Cook at a higher risk for substance use as an adolescent and continued use as an adult.
2. Social factors: Mr. Cook described his mother as a "bad influencer." She struggled with mental and drug issues, which made her incapable of caring for him. She enabled his maladaptive and drug seeking behaviors, e.g. she once brought him drugs to the youth detainment facility, after which she was prohibited from visiting him. Mr. Cook spent the majority of his life in juvenile facilities, which further exacerbated his emotional and behavioral problems.
3. Psychological factors: Mr. Cook was abandoned by his mother as a child. She was inconsistently present in his life which created separation anxiety for him as a child and progressed to an anxiety disorder as an adolescent and adult. This likely played a role in his substance use as a tool of self-medication, which commonly occurs in individuals with anxiety and mood disorders.

Mr. Joshua Cook met DSM-5 criteria for three psychiatric illnesses:

1. Opioid Use Disorder, severe
2. Unspecified Bipolar Disorder, and
3. Conduct Disorder, Unspecified Onset (started in adolescence).

These psychiatric illnesses often occur in conjunction; in fact, there is a strong relationship between Bipolar and Substance Use Disorders. Individuals with both disorders, as in case of Mr. Cook, have a more severe course of illness (as evidenced by his frequent hospitalizations), aggressive behavior, legal problems, and suicide. Bipolar Disorder and Substance Use Disorder share common mechanisms, including impulsivity, poor modulation of motivation and responses to rewarding stimuli, which in turn leads to increased risk of maladaptive behaviors and legal problems. In addition, his diagnosis of Conduct Disorder places him at a higher risk for Substance Abuse, legal problems and injury to self or others.

Individuals with Conduct Disorder, as Mr. Cook, are likely to have impaired decision-making capacity as a result of impulsivity, delay aversion, heightened sensitivity to immediate reward, and propensity toward risk-tasking behaviors. These conditions are thought to contribute to the greater incidence of Substance Use Disorders seen with Conduct Disorder. This association is estimated to be between 75% to 95% in individuals whose childhood conduct problems extend into adulthood. Substance Use Disorders further impair the decision-making capacity in individuals with underlying Conduct Disorder, and this impairment was found to increase with time as there is lack of adaptation in these individuals to avoid negative consequences.

Mr. Cook's primary substances of use were opioids and stimulants. Both of these substances are very effective and efficient stimulators of the reward pathway in the human brain. Typically, opioids produced by our own bodies are released when we engage in pleasurable activities and these opioids stimulate the production of dopamine in the so-called "Reward Center of the Brain." In the case of external use of opioids or stimulants, these substances directly agonize the internal receptors that cause the dopamine release. So, the pleasurable activity that the brain begins to crave is taking the drug itself and this is how addiction arises. The seeking of and taking of drugs supersedes virtually every other activity including even eating. Thus, addiction is truly a disease of the brain.

In Mr. Cook case, his Substance Use Disorder started at a critical age during adolescence, which is often associated with alterations in brain structure, function, and neurocognition. While the developing brain may be more resilient to neurotoxic effects, exposure to drugs during a period of critical neurological development may interrupt the natural course of brain maturation and key processes of brain development. In fact, adolescence may be a period of heightened vulnerability for drug's effect on the brain. Adolescent drug users exhibit decrements in memory, attention and speeded information processing, and executive functioning, specifically in future planning, abstract reasoning strategies, and generation of new solutions to problems. These behavioral ramifications of drug use may emerge as a consequence of the reduced volume of important brain structures (e.g.,

hippocampus) and abnormalities in activation during cognitive tasks. Cognitive deficits resulting from these drug-related neural insults have potentially harmful implications for subsequent academic, occupational, and social functioning extending into adulthood.

Effective treatments for Opioid and Stimulant Use Disorder exist. Comprehensive treatment gives the best chance of long-lasting remission. Interventions for treatment of Substance Use Disorder include both pharmacological and psychosocial interventions, such as contingency management, individual, group and family counseling, motivational interviewing, case management and 12-step interventions. Opioid Agonist Therapy (with methadone or buprenorphine) is the mainstay treatment for Opioid Use Disorder. It has been found to stabilize neuronal circuitry, prevent withdrawals and cravings, extinguish compulsive behaviors, prevent spread of HIV and Hepatitis C, and prevent criminal activity. Studies have shown that IV drug use was reduced by more than 70% in individuals undergoing methadone maintenance, and the number of criminal days per year decreased from an average of two hundred and thirty-seven to fourteen criminal days per year in individuals maintained on methadone therapy. In addition to effective treatment of the Substance Use Disorder, there is also strong evidence to show that appropriate treatment of Bipolar Disorder through pharmacological and behavioral interventions can improve maladaptive behaviors, decrease risk of relapse on illicit substances, and subsequently reduce risk of recidivism.

QUALIFICATIONS OF THE EVALUATOR

Mohammed Issa is a clinical instructor at Harvard Medical School with clinical appointments in the Departments of Anesthesiology and Psychiatry. He graduated from Alexandria Medical School in 2003 and completed Psychiatry Residency at West Virginia University in 2011, Addiction fellowship at Yale School of Medicine in 2012, Pain Medicine Fellowship at Brigham and Women's Hospital in 2013, and Forensic Psychiatry Fellowship at West Virginia University in 2014. He is the current Director of the Pain Medicine Fellowship at Brigham and Women's Hospital, and Medical Director of the pain clinic at Brigham and Women's Faulkner Hospital. He is board certified in Psychiatry, Addiction Psychiatry and Pain Medicine.

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